Best Practices: Fort Walton Machining Gets It Right the First Time, Every Time

Posted on August 13th, 2020 on FloridaMakes.com

When national security and the lives of armed forces are on the line, the integrity of the crafting and production of our country's military assets require the expert oversight of the most prepared, most skilled manufacturers. When that sort of excellence is called upon, **Fort Walton Machining, Inc.** answers the call.

"We get it right the first time, every time," says Fort Walton Machining's (FWM) Director of Operations, Tim McDonald. FWM is one of this year's Florida Sterling Manufacturing Business Excellence Awards Finalists – one of ten elite manufacturers singled out for industry excellence. This small woman-owned company nestled in the Florida panhandle not far from Eglin and Tyndall Air Force Bases keeps their company's roots front and center.

"Family is at the heart of what we do," says McDonald, the second generation leading FWM into the 2020s. Founded in 1987, McDonald's father, Tim Sr. bought the company and grew it. "You go learn what we make," McDonald recalls his father saying to him as his dad ventured into manufacturing learning the sales end of the sector while Tim learned the technical. The present-day company's primary focus is manufacturing aerospace defense parts.

"Pretty much almost every military aircraft the U.S. Air Force has in their arsenal, we've built parts for at one point in time or another," says McDonald. FWM is responsible for the making of aerospace airframes and all internal components – the "skeleton" – of the aircraft and includes models of aircraft ranging from F-16s, F-18s, F-35s to CH47 Chinook Helicopters, although there are dozens of others.

"Getting it right the first time, every time" is like a mantra that McDonald says his company "must live by every day." "There is no downtime when your job is to help build some of the U.S.'s most essential military aircraft," says McDonald.

FWM's uniqueness in the sector resides in its diversity and volume of product. Combine this with multi-layered process management systems and FWM runs like a symphony of precision manufacturing and quality oversight. The result: perfectly manufactured products.

Best Practices: Process Management "You Can't Just Say it, You've Got to Live it"

"We're doing something different every day," says McDonald. "Unlike commercial aircraft manufacturers who might make hundreds of the same things every day, we're a high mix, low volume shop. We're doing things in small batches, piece-by-piece."

It comes as no surprise, that an aerospace defense manufacturer with the diversity of products like FWM likely has some of the most stringent and complex process management requirements of any industry sector. And this is where FWM shines.

"If you don't make the proper investment in process management and follow it carefully, you'll have failures," says McDonald, "And failures in our industry can cost lives. So, you must live it. You can't just say it, you've got to live it."

For FWM this starts with the quality management systems. "FWM touts a robust quality management system that is second to none in the industry," says McDonald. "We have an over-arching umbrella that breaks out into over 300-400 processes that intersect all aspects of the production process." Those areas range from Standard Operating Procedures to ethics and technical processes just to name a few.

This sort of focus permeates all aspects of FWM's process management systems and one birds-eye glimpse could be an aspect like certifications.

"In a complex industry like ours, there are a lot of certifications that drive your processes," says McDonald. "In a nutshell, imagine dozens and dozens of regulatory and statutory requirements. Not only do those requirements have to be met, they are often revised. All these revisions come with an intense audit. Audits usually result in findings and our process management system is so prioritized that we're accustomed to coming out of audits with zero findings." This standard of perfection has become synonymous with the work of FWM.

"Fort Walton Machining is outstanding in so many categories," says Daniel Krug, the FloridaMakes Business Advisor serving FWM. "They model excellence in the realm of process management and a lot of that has to do with their leadership's commitment to detail. They have a laser-like focus that is evident in its final, perfect product."

SMBE Award Process

Now on its second time as a finalist, FWM was once hesitant about participation. "When you first find out you're nominated, it's great of course," says McDonald. "I had to weigh how much staff time this might require but once we met with the FloridaMakes team there was no question we wanted to be a part of the process."

McDonald encourages other manufacturers to get involved with local manufacturing associations and in all that is going on within the Florida maker communities. "Florida is about more than tourism. I know at FWM we have a bigger vision for what we know is possible in Florida so I would like to see more manufactures step into the space of helping expand that vision," McDonald recommends. Participating in the SMBE process is a start. "The business advisors have tremendous insight into the industry but what was exciting was the chance to have examiners from a broad spectrum of industries onsite. We've established great relationships with the best of the best in Florida and we learned from industry leaders while we sharing what we do well."